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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

|                        |   |
|------------------------|---|
| Attorney Docket No.    | 24061.142                               |
| First Inventor         | Ai-Sen Liu                              |
| Title                  | Method for Forming Dielectric Barrier I |
| Express Mail Label No. | EV333435502US                           |

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

**ADDRESS TO:**Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 17]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration [Total Sheets       ]
  - a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Reader Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ Paper
  - c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Express Mail Certificate.....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation      ☐ Divisional      ☐ Continuation-in-part (CIP)      of prior application No.: .....

Prior application information:

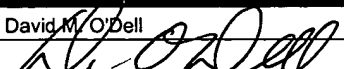
Examiner

Art Unit:

For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**
☒ Customer Number: 27683      OR      ☐ Correspondence address below

|         |                             |           |              |          |            |
|---------|-----------------------------|-----------|--------------|----------|------------|
| Name    | David M. O'Dell             |           |              |          |            |
| Address | Haynes and Boone, LLP       |           |              |          |            |
|         | 901 Main Street, Suite 3100 |           |              |          |            |
| City    | Dallas                      | State     | Texas        | Zip Code | 75202-3789 |
| Country | USA                         | Telephone | 972-739-8635 | Fax      |            |

|                   |   |                                   |        |
|-------------------|---|-----------------------------------|--------|
| Name (Print/Type) | David M. O'Dell   | Registration No. (Attorney/Agent) | 42,044 |
| Signature         |  | Date                              | 9-9-03 |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

19704 U.S. PTO  
10/657847

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 2,478.00

## Complete if Known

Application Number  
Filing Date  
First Named Inventor Ai-Sen Liu  
Examiner Name  
Art Unit  
Attorney Docket No. 24061.142

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number 08-1394

Deposit Account Name Haynes and Boone, LLP

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description        | Fee Paid     |
|----------------------------|----------------------------|------------------------|--------------|
| 1001 750                   | 2001 375                   | Utility filing fee     | 750.00       |
| 1002 330                   | 2002 165                   | Design filing fee      |              |
| 1003 520                   | 2003 260                   | Plant filing fee       |              |
| 1004 750                   | 2004 375                   | Reissue filing fee     |              |
| 1005 160                   | 2005 80                    | Provisional filing fee |              |
| SUBTOTAL (1)               |                            |                        | (\$ ) 750.00 |

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims          | Extra Claims | Fee from below | Fee Paid |
|-----------------------|--------------|----------------|----------|
| 74                    | -20** = 54   | 18             | 972.00   |
| Independent Claims 12 | -3** = 9     | 84             | 756.00   |
| Multiple Dependent    |              |                |          |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description  |
|----------------------------|----------------------------|--|
| 1202 18                    | 2202 9                     | Claims in excess of 20                                     |
| 1201 84                    | 2201 42                    | Independent claims in excess of 3                          |
| 1203 280                   | 2203 140                   | Multiple dependent claim, if not paid                      |
| 1204 84                    | 2204 42                    | ** Reissue independent claims over original patent         |
| 1205 18                    | 2205 9                     | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ ) 1,728.00

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code    | Fee (\$) | Fee Code    | Fee (\$) | Fee Description  | Fee Paid |
|-------------|----------|-------------|----------|--|----------|
| 1051 130    |          | 2051 65     |          | Surcharge - late filing fee or oath  |          |
| 1052 50     |          | 2052 25     |          | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053 130    |          | 1053 130    |          | Non-English specification  |          |
| 1812 2,520  |          | 1812 2,520  |          | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804 920*   |          | 1804 920*   |          | Requesting publication of SIR prior to Examiner action                     |          |
| 1805 1,840* |          | 1805 1,840* |          | Requesting publication of SIR after Examiner action                        |          |
| 1251 110    |          | 2251 55     |          | Extension for reply within first month                                     |          |
| 1252 410    |          | 2252 205    |          | Extension for reply within second month                                    |          |
| 1253 930    |          | 2253 465    |          | Extension for reply within third month                                     |          |
| 1254 1,450  |          | 2254 725    |          | Extension for reply within fourth month                                    |          |
| 1255 1,970  |          | 2255 985    |          | Extension for reply within fifth month                                     |          |
| 1401 320    |          | 2401 160    |          | Notice of Appeal   |          |
| 1402 320    |          | 2402 160    |          | Filing a brief in support of an appeal                                     |          |
| 1403 280    |          | 2403 140    |          | Request for oral hearing   |          |
| 1451 1,510  |          | 1451 1,510  |          | Petition to institute a public use proceeding                              |          |
| 1452 110    |          | 2452 55     |          | Petition to revive - unavoidable   |          |
| 1453 1,300  |          | 2453 650    |          | Petition to revive - unintentional   |          |
| 1501 1,300  |          | 2501 650    |          | Utility issue fee (or reissue)   |          |
| 1502 470    |          | 2502 235    |          | Design issue fee   |          |
| 1503 630    |          | 2503 315    |          | Plant issue fee  |          |
| 1460 130    |          | 1460 130    |          | Petitions to the Commissioner  |          |
| 1807 50     |          | 1807 50     |          | Processing fee under 37 CFR 1.17(q)  |          |
| 1806 180    |          | 1806 180    |          | Submission of Information Disclosure Stmt                                  |          |
| 8021 40     |          | 8021 40     |          | Recording each patent assignment per property (times number of properties) |          |
| 1809 750    |          | 2809 375    |          | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810 750    |          | 2810 375    |          | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801 750    |          | 2801 375    |          | Request for Continued Examination (RCE)                                    |          |
| 1802 900    |          | 1802 900    |          | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 0.00

## SUBMITTED BY

Name (Print/Type) David M O'Dell Registration No. 42,044 Telephone 972-739-8635  
Signature [Signature] (Attorney/Agent) Date 9-9-03

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2. Customer No. 27683

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                             |   |                            |
|-----------------------------|---|----------------------------|
| In re application of:       | § | Atty Docket No.: 24061.142 |
| Liu, et al.                 | § |                            |
|                             | § | Customer No.: 27683        |
| Serial No. Unknown          | § |                            |
|                             | § | Group Art Unit:            |
| Filed: Herewith             | § |                            |
|                             | § | Examiner:                  |
| For: METHOD FOR FORMING     | § |                            |
| DIELECTRIC BARRIER LAYER IN | § |                            |
| DAMASCENE STRUCTURE         | § |                            |

EXPRESS MAIL CERTIFICATE

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

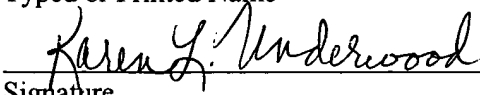
Express Mail Number: EV333435502US

Date of Deposit: September 9, 2003

I hereby certify that the following attached papers and fee:

1. Utility Patent Application Transmittal;
2. Fee Transmittal (in duplicate);
3. Patent Application consisting of 17 pages of specification, 13 pages of claims and 1 page Abstract of Disclosure;
4. Seven (7) drawing sheets;
5. Unexecuted Declaration;
6. Unexecuted Power of Attorney;
7. Application Data Sheet;
8. Check in the amount of \$2478.00; and
9. Return Postcard

are being deposited with United States Postal Service "Express Mail Post Office to Addressee" to the Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Karen L. Underwood  
Typed or Printed Name  
  
Signature  
R54907